



SEQUENCE LISTING

<110> Abbott Laboratories
Reilly, Edward B.
Lacy, Susan E.
Fung, Emma
Belk, Johathan P.
Roguska, Mich  el

<120> Antibodies To Erythropoietin Receptor
And Uses Thereof

<130> 7349USP1

<140> 10/822,306

<141> 2004-04-12

<150> 10/821,497

<151> 2004-04-09

<160> 29

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> scFv linker

<400> 1

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 2

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> scFv linker

<400> 2

Gly Glu Asn Lys Val Glu Tyr Ala Pro Ala Leu Met Ala Leu Ser
1 5 10 15

<210> 3

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> scFv linker

<400> 3

Gly Pro Ala Lys Glu Leu Thr Pro Leu Lys Glu Ala Lys Val Ser

1 5 10 15
 <210> 4
 <211> 15
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> scFv linker

 <400> 4
 Gly His Glu Ala Ala Val Met Gln Val Gln Tyr Pro Ala Ser
 1 5 10 15

 <210> 5
 <211> 116
 <212> PRT
 <213> Homo sapiens

 <400> 5
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Arg Glu Arg Leu Gly Ile Gly Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110
 Thr Val Ser Ser
 115

 <210> 6
 <211> 116
 <212> PRT
 <213> Homo sapiens

 <400> 6
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Ala Ser Ile Ser Ser Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Lys Leu Arg Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Arg Glu Arg Leu Gly Ile Gly Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110
 Thr Val Ser Ser
 115

<210> 7
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 7
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Ala Ser Ile Ser Ser Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Tyr Ile Gly Gly Glu Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Lys Leu Arg Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Arg Glu Arg Leu Gly Ile Gly Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110
 Thr Val Ser Ser
 115

<210> 8
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 8
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Ala Ser Ile Ser Ser Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Tyr Ile Ala Gly Thr Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Lys Leu Arg Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Arg Glu Arg Leu Gly Ile Gly Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110
 Thr Val Ser Ser
 115

<210> 9
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 9
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Ala Ser Ile Ser Ser Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45

Gly	Tyr	Ile	Gly	Tyr	Ser	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys
50						55					60				
Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe	Ser	Leu
65					70					75					80
Lys	Leu	Arg	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
			85						90					95	
Arg	Glu	Arg	Leu	Gly	Ile	Gly	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val
			100					105					110		
Thr	Val	Ser	Ser												
			115												

<210> 10
 <211> 116
 <212> PRT
 <213> Homo sapiens

Gln	Val	Gln	Leu	Gln	Glu	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Glu
1				5					10					15	
Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Ala	Ser	Ile	Ser	Ser	Tyr
		20						25					30		
Tyr	Trp	Ser	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile
		35				40						45			
Gly	Tyr	Ile	Tyr	Gly	Ser	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys
		50				55					60				
Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe	Ser	Leu
65					70					75					80
Lys	Leu	Arg	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
			85					90						95	
Arg	Glu	Arg	Leu	Gly	Ile	Gly	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val
			100					105					110		
Thr	Val	Ser	Ser												
			115												

<210> 11
 <211> 116
 <212> PRT
 <213> Homo sapiens

Gln	Val	Gln	Leu	Gln	Glu	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Glu
1				5					10					15	
Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Ala	Ser	Ile	Ser	Ser	Tyr
		20						25					30		
Tyr	Trp	Ser	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile
		35				40						45			
Gly	Tyr	Ile	Tyr	Tyr	Glu	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys
		50				55					60				
Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe	Ser	Leu
65					70					75					80
Lys	Leu	Arg	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
			85					90						95	
Arg	Glu	Arg	Leu	Gly	Ile	Gly	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val
			100					105					110		
Thr	Val	Ser	Ser												
			115												

<210> 12
 <211> 116

<212> PRT
 <213> Homo sapiens

<400> 12

Gln	Val	Gln	Leu	Gln	Glu	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Glu
1				5					10					15	
Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Ala	Ser	Ile	Ser	Ser	Tyr
			20					25					30		
Tyr	Trp	Ser	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile
		35					40					45			
Gly	Tyr	Ile	Gly	Gly	Ser	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys
	50					55					60				
Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe	Ser	Leu
65					70					75					80
Lys	Leu	Arg	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
				85					90					95	
Arg	Glu	Arg	Leu	Gly	Ile	Gly	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val
			100					105						110	
Thr	Val	Ser	Ser												
			115												

<210> 13
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 13

Gln	Val	Gln	Leu	Gln	Glu	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Glu
1				5					10					15	
Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Ala	Ser	Ile	Ser	Ser	Tyr
			20					25					30		
Tyr	Trp	Ser	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile
		35					40					45			
Gly	Tyr	Ile	Tyr	Gly	Glu	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys
	50					55					60				
Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe	Ser	Leu
65					70					75					80
Lys	Leu	Arg	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
				85					90					95	
Arg	Glu	Arg	Leu	Gly	Ile	Gly	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val
			100					105						110	
Thr	Val	Ser	Ser												
			115												

<210> 14
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 14

Gln	Val	Gln	Leu	Gln	Glu	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Glu
1				5					10					15	
Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Ala	Ser	Ile	Ser	Ser	Tyr
			20					25					30		
Tyr	Trp	Ser	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile
		35					40					45			
Gly	Tyr	Ile	Gly	Tyr	Glu	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys
	50					55					60				
Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe	Ser	Leu

65					70					75					80
Lys	Leu	Arg	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
				85					90					95	
Arg	Glu	Arg	Leu	Gly	Ile	Gly	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val
			100					105					110		
Thr	Val	Ser	Ser												
			115												

<210> 15
 <211> 116
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Xaa denotes Tyr or Gly or Ala
 <223> Xaa denotes Tyr or Gly or Ala or Glu or Asp
 <223> Xaa denotes Ser or Gly or Glu or Thr

<400> 15															
Gln	Val	Gln	Leu	Gln	Glu	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Glu
1				5					10					15	
Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Ala	Ser	Ile	Ser	Ser	Tyr
			20					25					30		
Tyr	Trp	Ser	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile
		35				40						45			
Gly	Tyr	Ile	Xaa	Xaa	Xaa	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys
	50					55					60				
Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe	Ser	Leu
65					70					75					80
Lys	Leu	Arg	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
				85					90					95	
Arg	Glu	Arg	Leu	Gly	Ile	Gly	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val
			100					105					110		
Thr	Val	Ser	Ser												
			115												

<210> 16
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 16															
Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
1				5					10					15	
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Asp
			20					25					30		
Leu	Gly	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Arg	Leu	Ile
		35				40						45			
Tyr	Ala	Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50					55					60				
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65					70					75					80
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Leu	Gln	His	Asn	Ser	Tyr	Pro	Pro
				85					90					95	
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys					
			100					105							

<210> 17
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 17
 Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
 20 25 30
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
 35 40 45
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Thr Tyr Pro Pro
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 18
 <211> 16
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Xaa denotes Tyr or Gly or Ala
 <223> Xaa denotes Tyr or Gly or Ala or Glu or Asp
 <223>
 Xaa denotes Ser or Gly or Glu or Thr

<400> 18
 Tyr Ile Xaa Xaa Xaa Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys Ser
 1 5 10 15

<210> 19
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 19
 Tyr Ile Gly Gly Glu Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys Ser
 1 5 10 15

<210> 20
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 20
 Tyr Ile Ala Gly Thr Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys Ser
 1 5 10 15

<210> 21
 <211> 16
 <212> PRT

<213> Homo sapiens

<400> 21

Tyr	Ile	Gly	Tyr	Ser	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys	Ser
1				5					10					15	

<210> 22

<211> 16

<212> PRT

<213> Homo sapiens

<400> 22

Tyr	Ile	Tyr	Gly	Ser	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys	Ser
1				5					10					15	

<210> 23

<211> 16

<212> PRT

<213> Homo sapiens

<400> 23

Tyr	Ile	Tyr	Tyr	Glu	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys	Ser
1				5					10					15	

<210> 24

<211> 16

<212> PRT

<213> Homo sapiens

<400> 24

Tyr	Ile	Gly	Gly	Ser	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys	Ser
1				5					10					15	

<210> 25

<211> 16

<212> PRT

<213> Homo sapiens

<400> 25

Tyr	Ile	Tyr	Gly	Glu	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys	Ser
1				5					10					15	

<210> 26

<211> 16

<212> PRT

<213> Homo sapiens

<400> 26

Tyr	Ile	Gly	Tyr	Glu	Gly	Ser	Thr	Asn	Tyr	Asn	Pro	Ser	Leu	Lys	Ser
1				5					10					15	

<210> 27

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Linker sequence

<400> 27

Gly	Phe	Lys	Asp	Ala	Leu	Lys	Gln	Pro	Met	Pro	Tyr	Ala	Thr	Ser
1				5				10					15	

<210> 28

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> N is A or G or C or T

<223> H is A or C or T

<223> S is C or G

<400> 28

gganhsnhsn hsnhsnhsnh snhsnhsnhs nhsnhsnhsn hsagt

45

<210> 29

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> V is A or C or G

<223> N is A or G or C or T

<223> S is C or G

<400> 29

ggavnsvnsv nsvnsvnsvn svnsvnsvns vnsvnsvnsv nsagt

45